

JACQUELINE K FAHERTY
Curriculum Vitae

American Museum of Natural History
Department of Astrophysics
79th Street and Central Park West
New York, NY 10023

E-mail: jfaherty17@gmail.com

Web: <http://www.dtm.ciw.edu/users/jfaherty/home.html/>

Education STONY BROOK UNIVERSITY
M.A Physics, 2006
Ph.D. Physics & Astronomy, 2010
Thesis Advisors: A. Burgasser (UCSD), M. Shara (AMNH), F. Walter (SBU)

UNIVERSITY OF NOTRE DAME
B.S. Physics , 2001

Honors and Awards

Student Commencement Speaker at Stony Brook University's PhD Convocation, 2011
Stony Brook President's Award for Distinguished Doctoral Students, 2011
Astronomical Society of New York Graduate Dissertation Award, 2010
Ford Pre Doctoral Fellowship Honorable Mention, 2007
Semi-finalist NASA JFPF Graduate Student fellowship, 2006, 2007
Teaching Materials Award of Distinction (for DTU Teachers Manual), AMNH, 2002
Outstanding Undergraduate Research Award, University of Notre Dame, 2001
Fulbright Grant Semi-Finalist, 2001
New York State Regents Scholar Award, 1996
New York State Scholar Athlete Award, 1996

Grants

NSF AST-1614527 Understanding Substellar Atmospheres: Constraining Physical Properties and Testing Models for Brown Dwarfs and Exoplanets (PI's E. Rice, J. Faherty, K. Cruz \$565,658)
Hubble Fellowship 2013 (\$374,112)
NSF AST-1313278 Collaborative Research: Deciphering Brown Dwarf Spectra: Disentangling Temperature, Age, Metallicity, Cloud Signatures (PI's K. Cruz, E. Rice, J. Faherty \$354,359)
University of New South Wales (UNSW) Visiting Scientist Fellowship 2012 (\$8,000)
NASA Astrophysics Data Analysis Program 2011 (PI E. Rice; Collaborator Faherty \$181,647)
NSF International Postdoctoral Research Fellowship Program Award, 2010 (\$125,000)
AAS Rodger Doxsey Dissertation Travel Award, 2010 (\$500)
AAS International Conference Travel Award, 2008, 2013 (\$2000 each)
American Museum of Natural History Research Fellowship recipient, 2008 (\$35,000)
Peter B Kahn Fellowship for travel to an International Conference, 2007 (\$1,500)
Northwestern REU Fellow 1999 (\$8,000)

Space Based Telescope Time

Spitzer Trigonometric Parallaxes of the Solar Neighborhood's Coldest Brown Dwarfs, Part 2 (PI Kirkpatrick, Co-I Faherty, Cycle 13-13012, 276 hrs)
The Young and the Restless: Revealing the Turbulent, Cloudy Nature of Young Brown Dwarfs and Exoplanets (PI Faherty, Cycle 10-10138, 318.2 hrs)
Mid-Infrared Variability of Our New Nearby Neighbor (PI Radigan, Co-I Faherty, Cycle 10-10158, 63.5 hrs)
A deep search for Y dwarfs to the WISE limit (PI infield, Co-I Faherty, Cycle 10-10135, 52.8hrs)
Spitzer Trigonometric Parallaxes of the Solar Neighborhood's Coldest Brown Dwarfs (PI Kirkpatrick, Co-I Faherty, Cycle 9-90007K, 141.5 hrs)

Infrared Monitoring of the Nearest Low-Mass T Tauri Binary: TWA 30AB (PI Burgasser, Co-I Faherty, Cycle 9-90236B, 18.8 hrs)

Postdoctoral Experience HUBBLE FELLOW, CARNEGIE DTM Washington, DC USA Sept. 2013 – September 2016
Host: Alycia Weinberger

NSF FELLOW, UNIVERSIDAD DE CHILE CERRO CALAN Santiago, Chile Sept. 2011 – Aug, 2013
Host: Maria Teresa Ruiz

Research Interests Properties of brown dwarfs and hot extrasolar planets
Kinematics, Astrometry
Star and Planet Formation
Wolf-Rayet Stars, Emission Line Stars, Planetary Nebulae

First Author Refereed Publications

12. POPULATION PROPERTIES OF BROWN DWARF ANALOGS TO EXOPLANETS

Faherty, Jacqueline K.; Adric R. Riedel, Kelle L. Cruz, Jonathan Gagne, Joseph C. Filippazzo, Erini Lambrides, Haley Fica, Alycia Weinberger, John R. Thorstensen, C. G. Tinney, Vivienne Baldassare, Emily Lemonier, Emily L. Rice, 2016, ApJs, 225, 10F.

11. RESULTS FROM THE WIDE-FIELD INFRARED SURVEY EXPLORER (WISE) FUTURE USES SESSION AT THE WISE AT 5 MEETING

Faherty, Jacqueline K.; Alatalo, K.; Anderson, L. D.; Assef, Roberto J.; Bardalez Gagliuffi, Daniella C.; Barry, Megan; Benford, Dominic J.; Bilicki, Maciej; Burningham, Ben; Christian, Damian J.; Cushing, Michael C.; Eisenhardt, Peter R.; Elvisx, Martin; Fajardo-Acosta, S. B.; Finkbeiner, Douglas P.; Fischer, William J.; Forrest, William J.; Fowler, John; Gardner, Jonathan P.; Gelino, Christopher R.; Gorjian, V; Grillmair, Carl J.; Gromadzki, Mariusz; Hall, Kendall P.; Ivezi'c, Zeljko; Izumi, Natsuko; Kirkpatrick, J. Davy; Kovcs, Andrs; Lang, Dustin; Leisawitz, David; Liu, Fengchuan; Mainzer, A.; Malek, Katarzyna; Marton, Gbor; Masci, Frank J.; McLean, Ian S.; Meisner, Aaron; Nikutta, Robert; Padgett, Deborah L.; Patel, Rahul; Rebull, L. M.; Rich, J. A.; Ringwald, Frederick A.; Rose, Marvin; Schneider, Adam C.; Stassun, Keivan G; Stern, Daniel; Tsai, Chao-Wei; Wang, Feige; Weston, Madalyn E.; L., Edward; Wright; Wu, Jingwen; Yang, Jinyi, 2015, 2015arXiv150501923F (White paper)

10. INDICATIONS OF WATER CLOUDS IN THE COLDEST KNOWN BROWN DWARF

Faherty, Jacqueline K.; Tinney, Chris; Skemer, Andrew; Monson, Andrew, 2014, ApJ, 793L, 16F.

9. CLOUD, TEMPERATURE, AND GRAVITY INDICATIONS IN THE SPECTRA OF THE CLOSEST BROWN DWARF BINARY SYSTEM

Faherty, Jacqueline K.; Beletsky, Yuri; Burgasser, Adam; Tinney, Chris; Osip, David; Simcoe, Robert, 2014, ApJ, 790, 90F.

8. CHARACTERIZING WOLF-RAYET STARS IN THE NEAR AND MID INFRARED

Faherty, Jacqueline K.; Shara, Michael M.; Zurek, David; Kanarek, Graham; Moffat, Tony, 2014, AJ, 147, 115F.

7. THE HETU'U GLOBAL NETWORK: MEASURING THE DISTANCE TO THE SUN USING THE JUNE 5TH/6TH TRANSIT OF VENUS

Faherty, Jacqueline K.; Rodriguez, David R.; Miller, Scott T., 2012, AER, 11a0203F.

6. 2MASSJ035523.51+113337.4: A YOUNG, DUSTY, NEARBY, ISOLATED BROWN DWARF RESEMBLING A GIANT EXOPLANET
Faherty, Jacqueline K.; Rice, Emily L.; Cruz, Kelle L.; Mamajek, Eric E.; Nunez, Alejandro; 2013, AJ, 145, 2F.
5. THE BROWN DWARF KINEMATICS PROJECT (BDKP). III. PARALLAXES FOR 70 ULTRACOOOL DWARFS.
Faherty, Jacqueline K.; Burgasser, Adam J.; Walter, Frederick M.; van der Bliik, Nicole S., Shara, Michael M.; Cruz, Kelle L., West, Andrew A.; Vrba, Frederick J.; Anglada-Escude, Guillem; 2012, ApJ, 752, 56F.
4. IDENTIFICATION OF A WIDE, LOW-MASS MULTIPLE SYSTEM CONTAINING THE BROWN DWARF 2MASS J0850359+105716
Faherty, Jacqueline K.; Burgasser, Adam J.; Bochanski, John J. ; Looper, Dagny L. ; West, Andrew A.; van der Bliik, Nicole S.; 2011, AJ, 141, 71F.
3. THE BROWN DWARF KINEMATICS PROJECT II. DETAILS ON NINE WIDE COMMON PROPER MOTION VERY LOW-MASS COMPANIONS TO NEARBY STARS.
Faherty, Jacqueline K.; Burgasser, Adam J.; Andrew A. West; John J. Bochanski; Cruz, Kelle L.; Shara, Michael M.; Walter, Frederick M.; 2010, AJ, 139, 176F.
2. THE BROWN DWARF KINEMATICS PROJECT I. PROPER MOTIONS AND TANGENTIAL VELOCITIES FOR A LARGE SAMPLE OF LATE-TYPE M, L, AND T DWARFS.
Faherty, Jacqueline K.; Burgasser, Adam J.; Cruz, Kelle L.; Shara, Michael M.; Walter, Frederick M.; Gelino, Christopher R. 2009, AJ, 137, 1F.
1. THE TRIGONOMETRIC PARALLAX OF THE NEUTRON STAR GEMINGA
Faherty, Jacqueline K.; Walter, Frederick.; Anderson, Jay.; 2007, Astrophysics and Space Science 308, 225

Refereed Publications

45. BANYAN. VIII. NEW LOW-MASS STARS AND BROWN DWARFS WITH CANDIDATE CIRCUMSTELLAR DISKS Boucher, Anne; Lafrenire, David; Gagn, Jonathan; Malo, Lison; Faherty, Jacqueline K.; Doyon, Ren; Chen, Christine H., 2016, ApJ, in press (arXiv 1608.08259).
44. MAGAO IMAGING OF LONG-PERIOD OBJECTS (MILO). II. A PUZZLING WHITE DWARF AROUND THE SUN-LIKE STAR HD 11112
Rodigas, Timothy J.; Bergeron, P.; Simon, Amelie; Arriagada, Pamela; **Faherty, Jackie**; Anglada-Escude, Guillem; Mamajek, Eric E.; Weinberger, Alycia; Butler, R. Paul; Males, Jared R.; Morzinski, Katie; Close, Laird M.; Hinz, Philip M.; Bailey, Jeremy; Carter, Brad; Jenkins, James S.; Jones, Hugh; O'Toole, Simon; Tinney, C. G.; Wittenmyer, Rob; Debes, John, 2016, ApJ, in press (arXiv 1609.02576).
43. THE FIRST SPECTRUM OF THE COLDEST BROWN DWARF
Andrew J. Skemer, Caroline V. Morley, Katelyn N. Allers, Thomas R. Geballe, Mark S. Marley, Jonathan J. Fortney, **Jacqueline K. Faherty**, Gordon L. Bjoraker, Roxana Lupa, 2016, ApJ, 826L, 17S.
42. A SURVEY FOR HOT CENTRAL STARS OF PLANETARY NEBULAE I. METHODS AND FIRST RESULTS
Graham C. Kanarek, Michael M. Shara, **Jacqueline K. Faherty**, David Zurek, Anthony F.J. Moffat, 2016, MNRAS, accepted (arXiv:1512.09306).

- 41.** THE NEAREST ISOLATED MEMBER OF THE TW HYDRAE ASSOCIATION IS A GIANT PLANET ANALOG
Kellogg, K.; Metchev, S.; Gagne, J., **Faherty, J.**, 2016, ApJ, 821L, 15K.
- 40.** THE FIRST BROWN DWARF/PLANETARY-MASS OBJECT IN THE 32 ORIONIS GROUP
Burgasser, Adam J.; Lopez, Mike A.; Mamajek, Eric E.; Gagne, Jonathan; **Faherty, Jacqueline K.**; Tallis, Melisa; Choban, Caleb; Escala, Ivanna; Aganze, Christian, 2016, ApJ, 820, 32B.
- 39.** PHOTOMETRIC BROWN-DWARF CLASSIFICATION. II. A HOMOGENEOUS SAMPLE OF 1361 L AND T DWARFS BRIGHTER THAN $J = 17.5$ WITH ACCURATE SPECTRAL TYPES
Skrzypek, N., Warren, S., **J., Faherty, J.K.**, 2016, A&A, 589A, 49S.
- 38.** CHARACTERIZATION OF THE VERY-LOW-MASS SECONDARY IN THE GJ 660.1AB SYSTEM
Aganze, Christian; Burgasser, Adam J.; **Faherty, Jacqueline K.**; Choban, Caleb; Escala, Ivanna; Lopez, Mike A.; Jin, Yuhui; Tamiya, Tomoki; Tallis, Melisa; Rockward, Willie, 2016, AJ, 151 46A.
- 37.** SEARCHING FOR BINARY Y DWARFS WITH THE GEMINI MULTI-CONJUGATE ADAPTIVE OPTICS SYSTEM (GEMS)
Opitz, Daniela; Tinney, C. G.; **Faherty, Jacqueline**; Sweet, Sarah; Gelino, Christopher R.; Kirkpatrick, J. Davy, 2016, ApJ, 819, 17O.
- 36.** DISCOVERY OF A BROWN DWARF COMPANION TO THE A3V STAR β CIRCINI
Smith, L. C.; Lucas, P. W.; Contreras Pea, C.; Kurtev, R.; Marocco, F.; Jones, H. R. A.; Beamin, J. C.; Napiwotzki, R.; Borissova, J.; Burningham, B.; **Faherty, J.**; Pinfield, D. J.; Gromadzki, M.; Ivanov, V. D.; Minniti, D.; Stimson, W.; Villanueva, V., 2015, MNRAS, 454 4476S.
- 35.** MAGAO IMAGING OF LONG-PERIOD OBJECTS (MILO). I. A BENCHMARK M DWARF COMPANION EXCITING A MASSIVE PLANET AROUND THE SUN-LIKE STAR HD 7449
Rodigas, Timothy J.; Arriagada, Pamela; **Faherty, Jackie**; Anglada-Escude, Guillem; Kaib, Nathan; Butler, R. Paul; Shectman, Stephen; Weinberger, Alycia; Males, Jared R.; Morzinski, Katie M.; Close, Laird M.; Hinz, Philip M.; Crane, Jeffrey D.; Thompson, Ian; Teske, Johanna; Diaz, Matias; Minniti, Dante; Lopez-Morales, Mercedes; Adams, Fred C.; Boss, Alan P., 2016, ApJ, 818, 106R.
- 34.** AN ALMA SURVEY FOR DISKS ORBITING LOW-MASS STARS IN THE TW HYA ASSOCIATION
Rodriguez, David R.; van der Plas, Gerrit; Kastner, Joel H.; Schneider, Adam C.; **Faherty, Jacqueline K.**; Mardones, Diego; Mohanty, Subhanjoy; Principe, David, 2015, A&A, 582L 5R.
- 33.** A NEAR-INFRARED SURVEY OF THE INNER GALACTIC PLANE FOR WOLF-RAYET STARS - III. NEW METHODS: FAINTEST WR STARS
Kanarek, G.; Shara, M.; **Faherty, J.**; Zurek, D.; Moffat, A., 2015, MNRAS, 452, 2858K.
- 32.** FUNDAMENTAL PARAMETERS AND SPECTRAL ENERGY DISTRIBUTIONS OF YOUNG AND FIELD AGE OBJECTS WITH MASSES SPANNING THE STELLAR TO PLANETARY REGIME
Filippazzo, Joseph C.; Rice, Emily L.; **Faherty, Jacqueline**; Cruz, Kelle L.; Van Gordon, Mollie M.;Looper, Dagny L., 2015, ApJ, 810, 158F.
- 31.** BANYAN. VII. A NEW POPULATION OF YOUNG SUBSTELLAR CANDIDATE MEMBERS OF NEARBY MOVING GROUPS FROM THE BASS SURVEY
Gagn, Jonathan; **Faherty, Jacqueline K.**; Cruz, Kelle L.; Lafrenire, David; Doyon, Ren; Malo, Lison; Burgasser, Adam J.; Naud, Marie-Eve; Artigau, tienne; Bouchard, Sandie; Gizis, John E.; Albert, Loc, 2015, ApJS, 219, 33G.

- 30.** SDSS J111010.01+011613.1: A NEW PLANETARY-MASS T DWARF MEMBER OF THE AB DORADUS MOVING GROUP; Gagn, Jonathan; Burgasser, Adam J.; **Faherty, Jacqueline K.**; Lafrenire, David; Doyon, Ren; Filippazzo, Joseph C.; Bowsher, Emily; Nicholls, Christine P., 2015, ApJ, 808L, 20G.
- 29.** BANYAN. VI. DISCOVERY OF A COMPANION AT THE BROWN DWARF/PLANET-MASS LIMIT TO A TUCANA-HOROLOGIUM M DWARF; Artigau, tienne; Gagn, Jonathan; **Faherty, Jacqueline**; Malo, Lison; Naud, Marie-Eve; Doyon, Ren; Lafrenire, David; Beletsky, Yuri, 2015, ApJ, 806, 254A.
- 28.** PHOTOMETRIC BROWN-DWARF CLASSIFICATION. I. A METHOD TO IDENTIFY AND ACCURATELY CLASSIFY LARGE SAMPLES OF BROWN DWARFS WITHOUT SPECTROSCOPY
Skrzypek, N., Warren, S., **J., Faherty, J.K.**, Mortlock, D. J., Burgasser, A.J, Hewett, P.C , 2014, MNRAS, in press.
- 27.** THE LUMINOSITIES OF THE COLDEST BROWN DWARFS
Tinney, Cris. G.; **Faherty, Jacqueline K.**; Kirkpatrick, J. Davy; Cushing, Michael C.; Morley, Caroline, V.; Wright, Edward L., 2014, ApJ, 796, 39T .
- 26.** WISEP J004701.06+680352.1: AN INTERMEDIATE SURFACE GRAVITY, DUSTY BROWN DWARF IN THE AB DOR MOVING GROUP
John E. Gizis, Katelyn N. Allers, Michael C. Liu, Hugh C. Harris, **Jacqueline K. Faherty**, Adam J. Burgasser, J. Davy Kirkpatrick, 2014, ApJ, in press (accepted 11/2014).
- 25.** HIGH PROPER MOTION OBJECTS FROM THE UKIDSS GALACTIC PLANE SURVEY
Leigh Smith, P.W. Lucas, R. Bunce, B. Burningham, H.R.A. Jones, R.L. Smart, N. Skrzypek, D. Rodriguez, **J. Faherty**, A.H. Andrei, S. Catalan, D.J. Pineld, D. Redburn, Anthony F. J., 2014, MNRAS, 14, 1370.
- 24.** THE ALLWISE MOTION SURVEY AND THE QUEST FOR COLD SUBDWARFS
Kirkpatrick, J. Davy; Schneider, Adam; Fajardo-Acosta, Sergio; Gelino, Christopher R.; Mace, Gregory N.; Wright, Edward L.; Logsdon, Sarah E.; McLean, Ian S.; Cushing, Michael C.; Skrutskie, Michael F.; Eisenhardt, Peter R.; Stern, Daniel; Balokovi, Mislav; Burgasser, Adam J.; **Faherty, Jacqueline K.**; Lansbury, George B.; Rich, J. A.; Skrzypek, Nathalie; Fowler, John W.; Cutri, Roc M.; Masci, Frank J.; Conrow, Tim; Grillmair, Carl J.; McCallon, Howard L.; Beichman, Charles A.; Marsh, Kenneth A., 2014, ApJ, 783, 122K.
- 23.** A NEAR-INFRARED SURVEY OF THE INNER GALACTIC PLANE FOR WOLF-RAYET STARS III. NEW METHODS: MOST DISTANT KNOWN GALACTIC WR STARS
Kanarek, Graham C.; Shara, Michael M.; **Faherty, Jacqueline K.**; Zurek, David; Moffat, Anthony F. J., 2014, AJ, submitted 03/2014 arXiv1403.0975K.
- 22.** A MONITORING CAMPAIGN FOR LUHMAN 16AB. I. DETECTION OF RESOLVED NEAR-INFRARED SPECTROSCOPIC VARIABILITY
Burgasser, Adam J.; Gillon, Michal; **Faherty, Jacqueline K.**; Radigan, Jacqueline; Triaud, Amaury H. M. J.; Plavchan, Peter; Street, Rachel; Jehin, E.; Delrez, L.; Opitom, C., 2014, ApJ, 785, 48B.
- 21.** THE COOLEST ISOLATED BROWN DWARF CANDIDATE MEMBER OF TWA
Gagn, Jonathan; **Faherty, Jacqueline K.**; Cruz, Kelle; Lafrenire, David; Doyon, Ren; Malo, Lison; Artigau, tienne, 2014, ApJ, 785L, 14G.
- 20.** A DUSTY M5 BINARY IN THE BETA PICTORIS MOVING GROUP
Rodriguez, David R.; Zuckerman, B.; **Faherty, Jacqueline K.**; Vican, Laura, 2014, A&A 567A, 20R.

19. VERY WIDE COMPANIONS TO WHITE DWARF-M DWARF BINARY SYSTEMS
Douglass, Stephanie; Allen, Peter; **Faherty, Jacqueline K.**, 2014, AJ, submitted.

18. DISCOVERY OF THE YOUNG L DWARF WISE J1741102.78-464225.5
Schneider, Adam C.; Cushing, Michael C.; Kirkpatrick, J. Davy; Mace, Gregory N.; Gelino, Christopher R.; **Faherty, Jacqueline K.**; Fajardo-Acosta, Sergio; Sheppard, Scott S., 2013, AJ, 147, 34S.

17. DISCOVERY OF THE Y1 DWARF WISE J064723.23-623235.5
Kirkpatrick, J. Davy; Cushing, Michael C.; Gelino, Christopher R.; Beichman, Charles A.; Tinney, C. G.; **Faherty, Jacqueline K.**; Schneider, Adam; Mace, Gregory N., 2013, ApJ, 776, 128K.

16. THE KAPPA ANDROMEDAE SYSTEM: NEW CONSTRAINTS ON THE COMPANION MASS, SYSTEM AGE & FURTHER MULTIPLICITY
Hinkley, Sasha; Pueyo, Laurent; **Faherty, Jacqueline K.**; Oppenheimer, Ben R.; Mamajek, Eric E.; Kraus, Adam L.; Rice, Emily L.; Ireland, Michael J.; David, Trevor; Hillenbrand, Lynne A, et al., ApJ, 779, 153H.

15. THE GALEX NEARBY YOUNG-STAR SURVEY
Rodriguez, David R.; Zuckerman, B.; Kastner, Joel H.; Bessell, M. S.; **Faherty, Jacqueline K.**; Murphy, Simon J., 2013, ApJ, 774, 101R.

14. NEARBY M, L, AND T DWARFS DISCOVERED BY THE WIDE-FIELD INFRARED SURVEY EXPLORER (WISE)
Thompson, Maggie A.; Kirkpatrick, J. Davy; Mace, Gregory N.; Cushing, Michael C.; Gelino, Christopher R.; Griffith, Roger L.; Skrutskie, Michael F.; Eisenhardt, Peter R. M.; Wright, Edward L.; Marsh, Kenneth A.; Mix, Katholeen J.; Beichman, Charles A.; **Faherty, Jacqueline K.**; Toloza, Odette; Ferrara, Jocelyn; Apodaca, Brian; McLean, Ian S.; Bloom, Joshua S, 2013, PASP, 125, 809T.

13. A WISE SEARCH FOR VERY LATE OBJECTS DETECTED ONLY IN THE W2-BAND
D. J. Pinfield, J. Gomes, A. C. Day-Jones, T. Cattermole, C. Cardoso, **J. Faherty**, M. T. Ruiz, R. Kurtev, J. R. A. Clarke, B. Burningham, L. Smith, R. Smart, P. W. Lucas, N. Lodieu, M. C. Galvez-Ortiz, J. S. Jenkins, S. Folkes, H. R. A. Jones, R. Rebolo, V. J. S. Bejar, B. Gauza, MNRAS, 437, 1009P.

12. WISE J163940.83-684738.6: A Y DWARF IDENTIFIED BY METHANE IMAGING
Tinney, Cris. G.; **Faherty, Jacqueline K.**; Kirkpatrick, J. Davy; Wright, Edward L.; Gelino, Christopher R.; Cushing, Michael C.; Griffith, Roger L.; Salter, Graeme, 2012, ApJ, 759, 60T.

11. DEEP SEARCH FOR COMPANIONS TO PROBABLE YOUNG BROWN DWARFS
G. Chauvin, **J. Faherty**, A. Boccaletti, K. Cruz, A.-M. Lagrange, B. Zuckerman, M. S. Bessell, J.-L. Beuzit, M. Bonnefoy, C. Dumas, P. Lowrance, D. Mouille, and I. Song; 2012, A&A, 548A, 33C.

10. DISCOVERY OF TWO VERY WIDE BINARIES WITH ULTRACOOL COMPANIONS AND A NEW BROWN DWARF AT THE L/T TRANSITION
Koraljka Muzic, Jacqueline Radigan, Ray Jayawardhana, Valentin D. Ivanov, **Jacqueline K. Faherty**, Radostin G. Kurtev, Alejandro Nunez, Henri M. J. Boffin, Olivier Hainaut, Kelle Cruz, David Jones, Stanimir Metchev, Amy Tyndall, Jura Borissova; 2012, AJ, 144, 180M.

9. DISCOVERY OF AN UNUSUALLY RED L-TYPE BROWN DWARF
John E. Gizis, **Jacqueline K. Faherty**, Michael C. Liu, Philip J. Castro, John D. Shaw, Frederick J. Vrba, Hugh C. Harris, Kimberly M. Aller, Niall R. Deacon; 2012, AJ, 144, 94G.

8. A NEAR-INFRARED SURVEY OF THE INNER GALACTIC PLANE FOR WOLF-RAYET STARS II. GOING FAINTER: 72 MORE NEW WR STARS Shara, Michael M.; **Faherty, Jacqueline K.**; Zurek, David; Moffat, Anthony F. J.; Gerke, Jill; Doyon, Ren; Artigau, Etienne; Drissen, Laurent; 2012, AJ, 143, 149S.
7. LOW-MASS TERTIARY COMPANIONS TO SPECTROSCOPIC BINARIES I: COMMON PROPER MOTION SURVEY FOR WIDE COMPANIONS USING 2MASS Allen, Peter; Burgasser, Adam J.; **Faherty, Jacqueline K.**; Kirkpatrick, Davy; 2012, AJ, 144, 62A.
6. WISEP J180026.60+013453.1: A NEARBY LATE L DWARF NEAR THE GALACTIC PLANE Gizis, John E.; Burgasser, Adam J.; **Faherty, Jacqueline K.**; Castro, Philip J.; Shara, Michael M.; 2011, AJ, 142, 171G.
5. A WIDELY SEPARATED, HIGHLY OCCLUDED COMPANION TO THE NEARBY LOW-MASS T TAURI STAR TWA 30
Looper, Dagny L.; Bochanski, John J.; Burgasser, Adam J.; Mohanty, Subhanjoy; Mamajek, Eric E.; **Faherty, Jacqueline K.**, West, Andrew A.; Pitts, Mark A.; 2010, AJ, 140, 1486L.
4. THE LOWEST-MASS MEMBER OF THE β PICTORIS MOVING GROUP
Rice, Emily L.; **Faherty, Jacqueline K.**, Cruz, Kelle L.; 2010, ApJ, 715L, 165R.
3. THE ENIGMATIC YOUNG, LOW-MASS VARIABLE TWA 30
Looper, Dagny L.; Bochanski, John J.; Mohanty, Subhanjoy; Burgasser, Adam J.; Mamajek, Eric E.; Herczeg, Gregory J.; West, Andrew A.; **Faherty, Jacqueline K.**, Rayner, John; Pitts, Mark A.; Kirkpatrick, J. Davy; 2010, ApJ, 714, 45L.
2. SPEX SPECTROSCOPY OF UNRESOLVED VERY LOW-MASS BINARIES. I. IDENTIFICATION OF SEVENTEEN CANDIDATE BINARIES STRADDLING THE L DWARF/T DWARF TRANSITION
Burgasser, Adam J.; Cruz, Kelle L.; Cushing, Michael; Gelino, Chris R.; Looper, Dagny L.; **Faherty, Jacqueline K.**; Kirkpatrick, J. Davy; Reid; I. Neill; 2010, ApJ, 710, 1142B.
1. 2MASS J061640066407194: THE FIRST OUTER HALO L SUBDWARF
Cushing, Michael C. ; Looper, Dagny.; Burgasser, Adam J.; Kirkpatrick, Davy; **Faherty, Jacqueline K.**; Cruz, Kelle.; Sweet, Anne; Sanderson, Robyn E.; 2009, ApJ, 696, 986.

Conference Proceedings

19. A MOLECULAR DISK SURVEY OF LOW-MASS STARS IN THE TW HYA ASSOCIATION
Rodriguez, David R.; van der Plas, Gerrit; Kastner, Joel H.; Schneider, Adam C.; **Faherty, Jacqueline K.**; Mardones, Diego; Mohanty, Subhanjoy; Principe, David, 2015, IAUS, Submitted (2015IAUS..314..207R).
18. THE BANYAN ALL-SKY SURVEY FOR BROWN DWARF MEMBERS OF YOUNG MOVING GROUPS
Gagn, Jonathan; Lafrenire, David; Doyon, Ren; **Faherty, Jacqueline K.**; Malo, Lison; Cruz, Kelle L.; Artigau, tienne; Burgasser, Adam J.; Naud, Marie-Eve; Bouchard, Sandie; Gizis, John E.; Albert, Loc, 2015, IAUS, Submitted (2015IAUS..314..49G).
17. RESULTS FROM BASS, THE BANYAN ALL-SKY SURVEY
Gagne, Jonathan; Lafreniere, David; Doyon, Rene; **Faherty, Jacqueline**; Malo, Lison, 2014, Cool Stars 18, Submitted (2014arXiv1410.3072G).
16. AGES OF BROWN DWARFS
Jacqueline K. Faherty, 2014, Gaia and the Unseen: The Brown Dwarf Question, Submitted.

15. YOUNG BROWN DWARFS AT THE EXOPLANET MASS BOUNDARY

Jacqueline K. Faherty, Kelle L. Cruz, Emily L. Rice, Adric Riedel, 2013, Latin America Regional IAU Meeting (LARIM), 2014RMxAC, 44, 53R.

14. YOUNG BROWN DWARFS AS GIANT EXOPLANET ANALOGS

Jacqueline K. Faherty, Kelle L. Cruz, Emily L. Rice, Adric Riedel, 2013, Fuerteventura Brown Dwarfs Come of Age, Submitted, (arXiv: 1307.1127G)

13. BAYESIAN ANALYSIS TO IDENTIFY VERY LOW-MASS MEMBERS OF NEARBY YOUNG STELLAR KINEMATIC GROUPS

Gagne, Jonathan; Lafreniere, David; Doyon, Rene; Malo, Lison; **Faherty, Jacqueline**; Artigau, Etienne, 2013, Fuerteventura Brown Dwarfs Come of Age, Submitted, (arXiv: 1307.1127G)

12. LUHMAN 16AB: A REMARKABLE, VARIABLE L/T TRANSITION BINARY 2 PC FROM THE SUN

Burgasser, A. J.; **Faherty, J.**; Beletsky, Y.; Plavchan, P.; Gillon, M.; Radigan, J.; Jehin, E.; Delrez, L.; Opitom, C.; Morrell, N, et al., 2013, Fuerteventura Brown Dwarfs Come of Age, Submitted, (arXiv: 1307.6916B)

11. YOUNG BROWN DWARFS AT LOW SPECTRAL RESOLUTION

Rice, Emily; Filippazzo, Joe; **Faherty, Jacqueline**; Cruz, Kelle, 2013, Protostars and Planets VI, (2013prpl.conf2K070R)

10. THE GALEX NEARBY YOUNG-STAR SURVEY

Rodriguez, David; Zuckerman, Ben; Kastner, Joel; Bessell, Mike; **Faherty, Jacqueline**; Murphy, Simon; Vican, Laura, 2013, Protostars and Planets VI, (2013prpl.conf2K096R)

9. LESSONS FROM BROWN DWARF SCIENCE: RECOGNIZING SIGNATURES OF YOUTH AND LOW GRAVITY IN THE NEAR INFRARED SPECTRA

Cruz, Kelle; **Faherty, Jacqueline**; Rice, Emily; Riedel, Adric; Nunez, Alejandro, 2013, Protostars and Planets VI, (2013prpl.conf2G022C)

8. YOUNG BROWN DWARFS AS GIANT EXOPLANET ANALOGS

Faherty, Jacqueline, K.; Cruz, Kelle; Rice, Emily; Riedel, Adric, 2013, Protostars and Planets VI, (2013prpl.conf2G024F)

7. THE KINEMATICS OF VERY LOW MASS DWARFS: SPLINTER SESSION SUMMARY

Burgasser, Adam J., **Faherty, Jacqueline K.**, Schmidt, Sarah, West, Andrew A., Zapatero Osorio, Maria Rosa, Pineda, J. Sebastian, Burningham, Ben, Nicholls, Christine, Sanderson, Robyn, Shkolnik, Evgenya, Rodriguez, David, Riedel, Adric, and Joergens, Viki. 2012, Proceedings on the 17th Cambridge Workshop on Cool Stars, Submitted.

6. JUVENILE ULTRACOOL DWARFS

Rice, Emily L., **Faherty, Jacqueline K.**, Cruz, Kelle, Barman, Travis, Looper, Dagny, Malo, Lison, Mamajek, Eric, Metchev, Stanimir, Shkolnik, Evgenya. 2010, Proceedings on the 16th Cambridge Workshop on Cool Stars, 448, 481R.

5. THE BROWN DWARF KINEMATICS PROJECT III. PRELIMINARY PARALLAX RESULTS

Faherty, Jacqueline K., Burgasser, Adam., Walter, Frederick., van der Bliik, Nicole S., & Shara, Michael., Cruz, Kelle L. 2010, Proceedings on the 16th Cambridge Workshop on Cool Stars, Proceedings on the 16th Cambridge Workshop on Cool Stars, 448, 1343F.

4. PROPER MOTIONS AND TANGENTIAL VELOCITIES FOR A LARGE SAMPLE OF LATE-TYPE M, L AND T DWARFS

Faherty, Jacqueline K.; Burgasser, Adam J.; Cruz, Kelle L.; Shara, Michael M.; Walter, Frederick M.; Gelino, Christopher R. 2009, Proceedings on the 15th Cambridge Workshop on Cool Stars, 1094, 517.

3. VERY LOW MASS OBJECTS IN ORION OBLA AND B

Walter, Frederick M., **Faherty, Jacqueline K.**; Sherry, William H.; Brittain, Sean; 2009, Proceedings on the 15th Cambridge Workshop on Cool Stars, 1094, 568.

2. A NEW POPULATION OF YOUNG BROWN DWARFS

Cruz, Kelle L. , Kirkpatrick, Davy.; Burgasser, Adam J., Looper, Dagny; Mohanty, Subhanjoy, Prato, Lisa; **Faherty, Jacqueline K.**, Solomon, Adam. 2008, Proceedings on the 14th Cambridge Workshop on Cool Stars, 384, 119.

1. BROWN DWARF KINEMATICS PROJECT

Faherty, Jacqueline K., Cruz, Kelle., Burgasser, Adam., Walter, Frederick., & Shara, Michael. 2008, IAU Symposium, Vol. 248, IAU Symposium, ed. W. J. Jin, I. Platais, & M. A. C. Perryman, 102-103

**Teaching
and
Outreach**

PROFESSOR, AMERICAN MUSEUM OF NATURAL HISTORY (AMNH) Winter 2015- Present
Instructor for the graduate level Masters in Teaching (MAT) Space Systems Course

ADJUNCT, CITY UNIVERSITY OF NEW YORK (CUNY) Spring 2008- Present
Instructor for School of Professional Studies Space Time and Motion Course

INSTRUCTOR, HAYDEN PLANETARIUM Fall 2010 - Present
Instructor for the NASA High School After School Program

LECTURER, HAYDEN PLANETARIUM Summer 2004 - Present
Presenter for Virtual Universe and Celestial Highlights monthly Planetarium programs

HAYDEN ASTROPHYSICS OUTREACH COORDINATOR, AMERICAN MUSEUM OF NATURAL HISTORY Spring 2003 - Fall 2004
Created the Hayden Planetarium's Outreach program for middle-high school students.

ASTRONOMY MOVEABLE MUSEUM COORDINATOR, AMERICAN MUSEUM OF NATURAL HISTORY Winter 2002 - Spring 2003
Created teaching materials then instructed with the moveable at various schools in NYC

INSTRUCTOR, AMERICAN MUSEUM OF NATURAL HISTORY Fall 2002 - Present
Presenter with the Eugene Lang Middle School Outreach program

TEACHING ASSISTANT, STONY BROOK UNIVERSITY Fall 2004, Spring 2005
Led practical portion of Observational Astronomy for majors.

INSTRUCTOR, AMATEUR ASTRONOMERS OF NEW YORK Fall, Winter, Spring, 2002, 2003
Instructor for Introduction to Astronomy and Cosmology courses

PROFESSIONAL DEVELOPMENT INSTRUCTOR, AMERICAN MUSEUM OF NATURAL HISTORY Spring 2002 - Fall 2004
Designed workshops for teachers from NYC schools on how to use AMNH as an Astronomy resource.

**Selected Media
Appearances**

New York Times: Contributing Scientist in various for the Summer of Science series
 NPR All Things Considered, 2016 Planet Line-up.
 NPR All Things Considered, 2015 Supermoon.
 NPR Weekend Edition, 2014 Geminids meteor shower.
 Contributing Scientist “Worlds Weirdest Weather”: Weather Channel, 8 episodes. Airing Fall 2014
 NPR Weekend Edition, Wall Street Journal, WPIX11, Village Voice, 2014 Manhattanhenge
 NY 1 TV, Accuweather.com, NY Post, ZDF German TV for July 11th, 2013 Manhattanhenge event
 WNYC Radio, NHK Japan TV interviews for July 11, 2012 Manhattanhenge event
 La Tercera, 24 horas, El Mercurio, RadioChile interviews for June 5th Transit of Venus event on
 Easter Island
 NPR Science Friday Radio, Televisa Mexico TV interviews for July 12th, 2011 Manhattanhenge
 event
 American Museum of Natural History Blog contributor

**Selected
Public
Talks**

SUMMER OF STARS AT THE HAYDEN PLANETARIUM, 2015
 GOING ROGUE: PLANETS WITHOUT PARENT STARS IN THE GALAXY
 Benjamin Dean Lecturer at the Morrison Planetarium, 2014
 STARS, CONSTELLATIONS, AND LEGENDS IN THE SOUTHERN SKY
 Virtual Universe and Celestial Highlights Talks at AMNH (6-10 each year)
 EL FUTURO DE LOS VIAJES EN ESPACIO
 Easter Island Museum, 2012
 THE GOOD, THE BAD, AND THE UGLY: ASTRONOMY IN THE MEDIA
 Columbia University Open Night, 2009
 PLANETS, PLANETS EVERYWHERE!
 Amateur Astronomers of New Jersey, 2009
 ROBOTS ON MARS: THE STORY OF SPIRIT AND OPPORTUNITY
 New School, 2006
SELECTED AMNH Astronomy LIVE Talks (monthly series in the Hayden):
 THE GRAND TOUR OF THE UNIVERSE
 STRANGE NEW WORLDS
 THINGS THAT GO BANG IN THE UNIVERSE
 ASTRONOMICAL PHENOMENAL REVEALED
 EXPERIENCE MANHATTANHENG
 ASTRONOMY LIVE: SKY TO SPACE
 MANHATTANHENG REVEALED!
 INSIGHTS FROM THE HUBBLE TELESCOPE
 THE EXPLOSIVE UNIVERSE
 OUR SOLAR NEIGHBORHOOD
 WHATS UP IN THE WINTER SKY?
SELECTED Astronomy on Tap Talks (monthly neighborhood bar talks):
 MANHATTANHENG EXPLAINED
 THE JAMES WEBB SPACE TELESCOPE
 DEBUNKING COSMOS
 HUBBLE’S WORLD

**Diversity
Efforts**

RAISING AWARENESS IN SCIENCE EDUCATION FOR WOMEN (RAISE-W) Current
 Along with Dr Mande Holford, a professor of chemistry at Hunter college, we have started a 501-c non-
 profit corporation entitled RAISE-W. Current efforts match young women with executive style coach
 mentors to foster a strong, supportive academic environment and study/encourage the retention of
 females on science career tracks.

ORGANIZER, EASTER ISLAND TRANSIT VIEWING Summer 2012
 Organized a 2-day Astronomy outreach workshop at the Easter Island Museum and a visit by 9

professional astronomers to the 3 main schools on the island to promote the June 5th Transit of Venus. 20% of the island was present for the viewing I organized at the Ahu Tahai Moai alter site.

ORGANIZER, GLOBAL HETU'U VENUS TRANSIT VIEWING NETWORK Summer 2012
Organized a global network of school groups in Chile, China, Australia, Europe, Japan, Iran, USA, India and Colombia to view the June 5th/6th transit of venus and combine timing measurements to compute the distance to the Sun.

PANELIST, AMNH AWIS CHAPTER Winter 2011
Served on a lunch panel with 4 senior female faculty members to to discuss issues related to gender that arise while doing field work

MENTOR, HAYDEN PLANETARIUM Fall 2010 - Present
Mentor for three high school female students in the NASA Science and Research Mentoring Program (SRMP)

NATIONAL SOCIETY OF BLACK PHYSICISTS Winter 2009, 2010
Attended annual meeting to give scientific talk and forge mentorships.

PRESENTER, TRENDSETTERS NETWORK CONFERENCE Fall 2002
Speaker at an all girls event where female professionals look to mentor young women in Science

MENTOR, INTERMEDIATE SCHOOL 162 Fall 2003-Spring 2004
Arranged Astronomy activities for the after-school programs at IS162 in the Bronx

PRESENTER, KIDS CORP DAY CAMP Summer 2002
Provided Astronomy activities for students bused in from NYC by aid societies to rural NJ

PRESENTER, WIZARDS OUTREACH PROGRAM Fall 2001
Mentored middle school females in Science through the WIZARDS outreach program

Observing Experience

VLT: UT1, UT2, UT3, ISAAC, X-shooter, FORS2 CTIO: Blanco 4.0m, 1.5m, 0.9m 1.3m with near-IR instruments ISPI, CPAPIR, ANDICAM optical imager CFIM; RC spectrograph; Echelle spectrograph
LCO: Clay and Baade 6.5m with MagE, LDSS-3, FIRE Spectrographs; PANIC near-IR imager
Dupont: CAPSCAM Optical imager
MDM: 1.3m, 2.4m with optical imager NELLIE, near-IR imager and spectrograph TIFKAM
IRTF: 3.5m with SpeX near-IR spectrograph
KECK: NIRSPEC
La Silla: NTT with SofI

Selected Scientific Talks

FUNDAMENTAL PROPERTIES OF BROWN DWARF EXOPLANET ANALOGS
Cool Stars Meeting, Sweden. Invited Talk, 2016

LIFE AROUND BROWN DWARFS?
Carnegie Origins meeting, Washington, DC, 2015.

THE BROWN DWARF KINEMATICS PROJECT: MEET OUR COOL PLANET-LIKE NEIGHBORS
Harvard CFA Colloquium, Boston, MA 2015.

THE BROWN DWARF KINEMATICS PROJECT: MEET OUR COOL PLANET-LIKE NEIGHBORS
Leiden University, Leiden, Netherlands, 2015.

THE BROWN DWARF KINEMATICS PROJECT: MEET OUR COOL PLANET-LIKE NEIGHBORS
Vassar College, Poughkeepsie, NY, 2015.

THE BROWN DWARF KINEMATICS PROJECT: MEET OUR COOL PLANET-LIKE NEIGHBORS
Bucknell Colloquium, Lewisburg, PA, 2015.

EXTREME PLANET-LIKE SYSTEMS: BROWN DWARFS AT THE EXOPLANET MASS BOUNDARY
Extreme Solar Systems III, Hilo Hawaii, 2015.

THE FUNDAMENTAL PROPERTIES OF GIANT EXOPLANET ANALOGS
In the Spirit of Lyot: Direct Detection of Exoplanets and Circumstellar Disks, Montreal, Quebec, 2015.

FUNDAMENTAL PROPERTIES OF AN AGE CALIBRATED SAMPLE OF BROWN DWARFS
IAUS 314: Young Stars and Planets Near the Sun, Atlanta, GA, 2015.

THE BROWN DWARF TO EXOPLANET CONNECTION
The Brown Dwarf to Exoplanet Connection Conference: From Atmospheres to Formation. Review and Workshop, University of Delaware, 2014.

AGES OF BROWN DWARFS
Gaia and the Unseen: The Brown Dwarf Question. Turin, Italy. Invited Review.

YOUNG BROWN DWARFS AT THE EXOPLANET MASS BOUNDARY
Cool Stars 18: Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, Flagstaff 2014

YOUNG BROWN DWARFS AT THE EXOPLANET MASS BOUNDARY
Universidad de Catolica Santiago, Chile, 11/2013, University of Delaware, USA, 3/2014, Carnegie Institution of Science, DTM, USA, 04/2014, Carnegie Institution of Science, Pasadena, USA 03/2014, Universit e de Montreal, Canada, 02/2014, Stony Brook University, USA, 02/2014, Harvard, CFA, USA, 05/2014

TO BE OR NOT TO BE (A PLANET): ISOLATED BROWN DWARFS AT THE EXOPLANET MASS BOUNDARY
Latin America Regional IAU Meeting (LARIM), Brazil 2013

THE KINEMATICS OF YOUNG BROWN DWARFS
Exoplanets and Brown Dwarfs: Mind the Gap, Hatfield, UK 2013

YOUNG BROWN DWARFS AS GIANT EXOPLANET ANALOGS
Brown Dwarfs Come of Age, Fuerteventura, Spain, 2013

ADVANCEMENTS IN ASTROMETRY: FROM BROWN DWARFS TO GIANT EXOPLANETS
University of New South Wales, Australia 2012

CHARACTERIZING GIANT EXOPLANET ANALOGS
2nd Australian Exoplanet Workshop, Canberra, Australia, 2012

ADVANCEMENTS IN ASTROMETRY: FROM BROWN DWARFS TO GIANT EXOPLANETS
University of Hertfordshire, Hatfield UK, 2012, Review talk at Cool Stars 17 Ultracool Dwarf Kinematics Splinter Session Barcelona, Spain, 2012

THE BROWN DWARF KINEMATICS PROJECT
Universidad de Chile, Cerro Calan Santiago, Chile 2011, Universidad Catolica Santiago, Chile 2011, European Southern Observatory Santiago, Chile 2011

THE BROWN DWARF KINEMATICS PROJECT: HOW DISTANCES BOTH ADVANCE AND COMPLICATE OUR UNDERSTANDING OF THE BROWN DWARF POPULATION
AAS 2011 Roger Doxsey Thesis Prize Presentation, Lehman College Astronomy 2011 Seminar, Penn State Astronomy Seminar 2011, Delaware Astronomy Seminar 2011, ASNY Graduate Thesis Prize Invited Talk 2011

LEARNING FROM THE MOTIONS OF ULTRACOOL DWARFS: COMPANIONS, AGES, HIGHER ORDER MULTIPLICITY

Recipes for Making Brownies: Theory vs. Observations, Netherlands 2009

MEETING OUR COOL, FAST, BROWN DWARF NEIGHBORS

MDM Consortium Meeting, New York 2009

LEARNING FROM THE MOTIONS OF ULTRACOOL DWARFS

National Society of Black and Hispanic Physicist Annual Meeting, Nashville, 2009

New York Workshop on Computer, Earth, and Space Sciences, New York 2009

A NEW POPULATION OF SUBSTELLAR MASS OBJECTS IN ORION

Astronomical Society of New York Annual Meeting, 2007

**Professional
Memberships
or Services**

AAS Committee on Education

Scientific Organizing Committee: WISE at 5: Legacy and Prospects

Scientific Organizing Committee: The Brown Dwarf to Exoplanet Connection Conference

Editor, conference proceedings, Gaia and the Unseen: The Brown Dwarf Question

Scientific Organizing Committee: Gaia and the Unseen: The Brown Dwarf Question

Scientific Organizing Committee: Exoplanets and Brown Dwarfs: Mind the Gap

Referee: ApJ, AJ, MNRAS, Science

American Astronomical Society

AAS Committee on the Status of Minorities in Astronomy (CSMA) term member

National Society of Black Physicists

American Association of University Women

Association for Women in Science